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ИНСТИТУТ АРХЕОЛОГИИ И ЭТНОГРАФИИ

## **КАМЕННЫЕ СТЕЛЫ ВИШАПЫ**

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## **THE VISHAP STONE STELAE**

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# ՎԻՇԱՊ ՔԱՐԱԿՈԹՈՂՆԵՐԸ

Խմբագիրներ՝  
*Արմեն Պետրոսյան*  
*Արսեն Բորոխյան*



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Տպագրվում է ՀՀ ԳԱԱ Հնագիտության և ազգագրության  
ինստիտուտի գիտական խորհրդի որոշմամբ

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Հայաստանի բարձր լեռներում մինչ օրս պահպանվել են հնագույն կոթողային հուշարձաններ, որոնց ժողովուրդն ավանդաբար կոչում է «վիշապ»: Խաչքարերի նման, վիշապ քարակոթողները հանդիպում են միայն Հայկական լեռնաշխարհում: Չնայած այս հուշարձաններն ավելի քան մեկ դար է, ինչ հայտնի են գիտությանը, սակայն բազմաթիվ խնդիրներ, կապված դրանց նշանակության, գործառույթի և թվագրության հետ, մնում են դեռևս չլուծված: Սույն ժողովածուն նվիրված է վիշապ քարակոթողների բազմակողմանի հետազոտությանը՝ առասպելաբանական, ազգագրական, լեզվաբանական և հնագիտական նոր տվյալների հիման վրա: Գիրքը նախատեսված է ինչպես մասնագետների, այնպես էլ Հայաստանի հնագույն շրջանի պատմությամբ և մշակույթով հետաքրքրվող ընթերցողների համար:

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# The Armenian dragon stones and a seal impression from Acemhöyük

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The “dragon stones” (Arm. *vishapakar* or, short, *vishap*) are among the most significant and at the same time most enigmatic megalithic monuments of the Armenian Highland. Largely unknown outside modern Armenia, their scientific discovery in the early XX century is intimately bound with the founding fathers of Transcaucasian archaeology. The first scientific mention of a dragon stone was published by Ekvtime Tokaishvili in 1909, who recorded the existence of a megalith of unidentified kind at Murdzhakheti, Georgia (Tokaishvili 1909, 28, fig. 12). In 1909 and 1910, Nikolay Jakovlevich Marr and Yakov Ivanovich Smirnov recorded further dragon stones located at the summer pastures of the Geghama Mountains just above the site of Garni (Marr, Smirnov 1931)<sup>1</sup>. The survey of Marr and Smirnov is still the most comprehensive overview of dragon stones to date, particularly if considered together with the revisions and addenda compiled by L. A. Barseghian in 1968 (Barseghian 1968; Gilibert, *infra*). Marr and Smirnov have been the first scholars to identify the dragon stones as a stand-alone megalithic family of menhir-like basalt monoliths carved with animal imagery, sometimes as high as five meters<sup>2</sup>.

The data collected from the Geghama Mountains can be used to work out a provisional typological classification of dragon stones into three main classes. The first typological class, which we may provisionally term the *vellus* class, comprises stones carved as if one or more hides of a male bovid had been draped on them (Barseghian 1968, №17). The image invariably represents a hide prepared in a pe-

culiar way, with legs, tail and head (including ears and horns) left attached and the back of the animal cut back into a thin strip<sup>3</sup>. Much attention is devoted to the animal’s head, which tends to be the only part of the hide carved in high relief and thus to project from the background as the most prominent element of the composition<sup>4</sup>. Sometimes, one or more wavy lines are engraved as if coming out of its mouth, representing perhaps a special preparation of the animal’s tongue, hair, or else a poured liquid charged with symbolic value<sup>5</sup>. Images of water birds may appear combined with the draped hides. The birds are always two in number, represented as antithetical couple. In one case, they are perched on a pole (*Imirzek 1*<sup>6</sup>). In another case, the birds are combined with a horizontal line (*Tokmagan-Göl 1*). These *vellus* megaliths have a characteristically prismatic or tetragonal shape, with the bottom usually narrower than the top. The second typological class, which we may call the *piscis* class, comprises megaliths cut and polished into the shape of a fish, often including anatomical details such as nostrils, fins, lateral lines and operculum (Barseghian 1968, №3). A zigzag motif is sometimes carved at both sides of the fish, perhaps to be interpreted as a geometric abstraction for scales. The shape of this sec-

1 The Armenian term *vishapakar*, that is, “dragon stones”, was introduced to Marr and Smirnov by their local guides (Barseghian 1968, 289).

2 The highest *vishapakar* to date (5.20m) has been found near Oltu in Erzurum region (Belli 2005, cf. also *infra*, Bobokhyan).

3 A similar preparation of a sacrificial bull, including the draping of the hide on a stone altar, was also practiced in medieval Transcaucasia: Marr 1931, 89; Ishkol-Kerovpian 1986, 80.

4 The case is also given of more than one hide represented on the same stone (e.g., *Azhdaha-Yurt 4*, *Tokmagan-Göl 6*, *Imirzek 3*).

5 Marr and Smirnov identify the liquid as water and speak of “filets d’eau” (Marr and Smirnov 1931, 90). However, if the wavy lines are to be interpreted as a representation of a flowing liquid, this liquid could as well be sacrificial blood (*infra*, Bobokhyan, Gevorkyan).

6 This label and the following refer to *vishapakar* of the Geghama Mountains as numbered in the synopsis published in Gilibert, *infra*.

ond class of dragon stones is usually fusiform and sometimes arcuated. Details of the reliefs are carved also on the belly of the fish (e.g., *Imirzek 6-7*), while the fish “tail” is invariably left uncarved<sup>7</sup>, proving that the *piscis* megaliths, much as the megaliths with the hide, were originally conceived as upright standing stones. The third typological class is a hybrid between the first and the second type of dragon stones, and may be termed the *hybrida* class (Barseghian 1968, №4). It consists of monoliths shaped in the form of a fish, with the belly of the fish prepared flat and carved with the image of one or more hides. The hides are represented spread along the vertical axis of the stone; whether the hide was represented with head pointing to the bottom or to the top of the megalith seems to have been of little consequence. In one case, the hide was not represented spread on the belly but draped on top of the fish. In this case, the representation of the hide was executed in a shortened form in order not to intrude on the carving of the fish (*Imirzek 2*, Barseghian 1968, №16). In another case, we find on the belly of the fish a hide with horned head in low relief, a further, detached animal head in high relief, and a couple of birds in low relief at the side of the latter (*Azhdahak-Yurt 8*, Barseghian 1968, №1). Iconography and style of the hides are identical to those observed on the first type of dragon stones. This is how we know that all three kinds of dragon stones belong to the same family of megaliths and also to the same time horizon.

Since the survey of Marr and Smirnov identified the dragon stones as a specific megalithic phenomenon, a growing number of affiliated megaliths have been observed. If we were to map all known dragon stones so far, we would see that this megalithic phenomenon had its epicenter in modern Armenia, but extended in surrounding regions (Hnila, *infra*). Thus far, no dragon stone has been excavated and neither their dating nor their function has been properly investigated. It seems natural to assume that they had a religious meaning and that they were involved in rituals, including the actual draping on some of them of a prepared skin. A crucial fact is that virtually every known dragon stone was recorded at high altitude summer pastures and

in close proximity to water sources. Between 1929 and 1933, the eminent Armenian archaeologist Ashkharbek Kalantar prospected the southern slopes of Mount Aragats and observed that the dragon stones were erected together with a complex system of artificial water reservoirs and channels devised to collect and regulate the melting water of the mountain peaks (Kalantar 1994). Kalantar dated this hydraulic network to the pre-Urartian period and advanced the hypothesis that it served the needs of a mixed agro-pastoral economy: “The system shows clearly that there was a great need of water for stock-breeding in the higher areas and to fulfill the agricultural needs in the lower regions” (Kalantar 1994, 32). An almost identical situation was described by Marr and Smirnov for the Geghama Mountains (Marr, Smirnov 1931, 81-87). Thus, it may be surmised that the erection of the dragon stones correlates on one hand with the reclamation of mountain meadows as pastures and on the other hand with the implementation of an irrigation system for settlements located at lower altitudes. This helps us advance a hypothesis as to the dating of the *vishapakar* phenomenon. The earliest wave of reclamation of high altitude mountain meadows in this region dates to the stock breeding pastoralist groups of the Middle Bronze Age (Edens 1995, 55; Puturidze 2003; Smith et al. 2009, 27-28; Laneri, Schwartz 2011, 346). At the same time we know that the dragon stones probably are not later than the end of the MBA II (defined here as 1800-1600 BC), since a dragon stone has been found re-used on a burial in Lchaschen dated to the 1800-1500 BC (Khanzadyan 2005). We also know of a series of Middle Bronze Age figurines and of painted wares from the Erzurum region with images of birds similar to those carved on the dragon stones (Esajan 1980; Özfırat 2001; Manaseryan, Balyan 2002). Following this line of argument and in lack of further elements, it seems reasonable to hypothesize a provisional date of the *vishapakar* phenomenon to the local Trialeti-Vanadzor phase of the Middle Bronze Age (c. 2100-1700 BC)<sup>8</sup>.

A specific problem in understanding the dragon stones is posed by the apparent lack of parallels that may help frame the dragon stones within a larger context of megalithic habits. This fact is surprising: after all, in the Middle Bronze Age the Armenian

<sup>7</sup> The drawing of a fish with a hide apparently carved along the lower half of the belly in Barseghian 1968, №4 has been published by mistake upside down.

<sup>8</sup> For a chronological overview, s. Smith et al. 2009, fig. 2.



Highland was a region well embedded into a much greater web of economic and cultural interconnections and exchange. Besides, the dragon stones are not a negligible religious gadget, but impressive monuments of great emotional and ritual impact. In particular, we would expect the dragon stones to leave a range of secondary traces in the archaeological record, and specifically we would expect to find images of dragon stones on other visual artifacts.

The lack of direct parallels and of a visual vocabulary connected to the dragon stones may be due to the fact that so far searching efforts have been consistently directed to the material culture of the social groups populating the steppes north and east of southern Caucasus. However, recent studies highlight how Middle Bronze Age Transcaucasia was also well connected with modern Central Turkey (Bobokhyan 2008; Laneri, Schwarz 2011). At the beginning of the II millennium BC, modern Central Turkey was fragmented into smaller territorial states ruled by local “princes” (Veenhof, Eidem 2008). These rulers controlled a wide-ranging network of long-distance trade and lived off its revenues, accumulating great economic power. Their palaces and administrative centers were a cosmopolitan and polyglot milieu, where cultural habits from faraway regions encountered and fused with local traditions (van Loon 1985). This “multiculturalism” is well reflected in the corpus of seal impressions found in the local administrative archives and store-rooms. Nimet Özgüç orders this rich corpus into Mesopotamian, Syrian, Old Assyrian, and Anatolian seal impressions (most recently, N. Özgüç 2002). The Anatolian group includes both cylinder and stamp seal impressions and is the one group that most reflects a “local” style and iconography, and probably also ownership (N. Özgüç 2002; Lumsden 2008). On one such “Anatolian” seal impression we find an image that may be connected to a dragon stone.

The seal impression (Fig. 1) was found in a “file room” at the ground floor of Sarikaya, one of two large administrative buildings at the site of Achemhöyük, near modern Aksaray (Özgüç 1980). Dendrochronological data cluster the erection date of the Sarikaya building around 1774 BC (Kuniholm et al. 2005, 45); its destruction by fire appears to be contemporary with the beginning of Level Ib at the site of Kültepe, i.e., around 1750 BC at the latest (Öztan 2008). Thus, the seal impression stored



Fig. 1. Seal impression from Achemhöyük.  
Drawing A. Gilibert after Özgüç 2002, 239

at Sarikaya can be dated to the second quarter of the XVIII century BC. We do not know who was the owner of the seal in question, but its impression was found together with others which belonged to seals of royals and dignitaries from all across Upper Mesopotamia, including the king of Assur and the king of Mari (Özgüç 1980, 62). Thus, it is likely that our seal belonged to a similarly preeminent individual with strong cultural ties to the native Anatolian milieu.

The image is a tripartite composition. Within a braided circle, we see a standing man on the left, an obelisk-shaped object in the middle and a sitting woman on the right. We recognize here the classic elements of an adoration scene, with a male adorant (presumably the owner of the seal) performing ritual offerings in front of an enthroned goddess. In this case, however, the ritual act is mediated by the obelisk-shaped artifact that conspicuously occupies the center of the scene and that appears to be the actual recipient of the adorant’s offerings. This “obelisk” is a pointed, elongated object standing on a base, incised with parallel grooves and adorned with two protruding horned bovine heads and the dangling foreleg of a bovine, to be probably interpreted as the lateral view of a leg pair. So far, this object is a singular occurrence in the contemporary visual repertory. What appears to be a round-topped variant of a similar artifact was used on the seal the *nibum*, an Old Assyrian institutional body appointed to the

Cappadocian trade affairs (Veenhof 1993; Dercksen 2004, 62-63; Cammarosano, *infra*)<sup>9</sup>. The image chosen for the seal of the *nibum* may be the rendition in Assyrian style of an image perceived as typically connected with the Cappadocian milieu. This would support the hypothesis that in the Middle Bronze Age pointed or round-topped artifacts with bovine protomes functioned as visual epitomes of religious practices characteristic for the Central Plateau of modern Turkey (Özgül 1980, 66).

So far, scholars have seen in the pointed, elongated artifact represented on the seal impression from Achemhöyük a tower-like building (Veenhof 1993; Kletter et al. 2010, 69). Özgül, however, has recently interpreted this object as a stele (Özgül 2002, 239). In favor of this interpretation and against the identification of the artifact with a building speaks the pointed shape, (remarkably unusual for a building), and the position of the artifact at the center of the composition. Among the impressions of stamp seals with adoration scenes found at Achemhöyük, the central position is invariably occupied by a cultic implement, mostly a table for offerings (Özgül 1980, fig. III/34-38). This invites to draw a functional analogy between a table on which offerings are placed and a stele in front of which offerings are performed.

If the identification of the object in question with a stele is correct, then both the physical characteristics and the cultural background of the representation can be compared to the first typological class of dragon stones described above, with whom they share the same time horizon. The stele on the Achemhöyük seal and the dragon stone share four significant traits: (1) an imposing height, (2) a decoration with bovine protomes, (3) the association of the bovine head with its dangling legs (a detail that is elsewhere unknown), and, finally, (4) an association between the stele and the presence of a water bird (in the Achemhöyük seal a water bird appears in the upper right corner of the image).

Another important aspect that the stele on the Achemhöyük seal shares with the Armenian dragon stones is its ritual embedment. The prepared bo-



Fig. 2. Seal impression from Achemhöyük.  
Drawing from Özgül 1980, fig. III/38

vine hides with head and extremities carved on the dragon stones clearly reflect the fact that similar hides were actually draped on the megaliths in the context of specific (seasonal?) rituals taking place on high altitude summer pastures, and specifically near water sources. The killing, the manipulation of the carcass, and the subsequent offering of one or more bovines may have also involved the pouring of sacrificial blood on the megalith, perhaps to be identified with the wavy lines coming out of the bovid heads on dragon stones. The stele on the Achemhöyük seal is at the center of an analogous ritual. The officiant is represented holding a vessel for libations and standing in front of a stele decorated with bovid heads and forequarters. The same cuts of meat are also the offers that the officiant is bringing next to the libation: a bovine leg prepared to be offered is represented behind him, while a horned head is represented above him. The bovine head is positioned right above the libation vessel. This can be interpreted as a methonymical clue indicating that the vessel contained the blood collected from the sacrificial animal at the moment of its slaughter.

We do not know where exactly the ritual depicted on the Achemhöyük seal took place. However, the goddess sitting on a stool behind the stele may help formulate a hypothesis. She is represented with loose hair, wearing a characteristic “knobbed” robe and holding a vegetal staff in her right hand. Above

<sup>9</sup> Veenhof and Eidem pleads for a different iconographical reading and see on the seal of the *nibum* „a seven tiered mountain, standing on four feet, with a bull’s head protruding, which probably is a rendering of the god Aššur” (Veenhof, Eidem 2008, 36, n. 91).

her head and next to the stele, we see a bird. The same goddess with the loose hair, the bird, and the “knobbed” robe is also represented on other impressions of a stamp seal from the archive rooms of Acemhöyük (Özgüç 1980, fig. III/38, reproduced here as Fig. 2). Here again, the context is an adoration scene with offerings, as indicated by the table set between the goddess and the officiant. The officiant has performed a libation (as indicated by the cup held by the goddess) and is bringing a bovid leg and a fish(!) as offerings. In this case, the goddess does not hold a vegetable staff but sits under a budding tree. A brook streams out the roots of the tree. If this goddess is the same goddess represented on the seal with the stele, then we may interpret the visual clues on both seals (the vegetable staff, the bird, the tree, the brook) as related to rituals that took place outside a built environment, not unlike the rituals that clustered around the dragon stones.

The seal impression with the stele from Acemhöyük and the dragon stones of the Armenian Highland are undoubtedly different artifacts. However, I would like to argue that both were the expressions of an analogous ritual practices related to cattle herding, involving the slaughtering of bovinds and the deposition of parts of the carcasses at a high standing stele located out in the open. In the first centuries of the II millennium BC, this ritual practice spread across a vast region, including the Central Plateau of modern Turkey and the Southern Caucasus. The diffusion of this practice may be related to the growing importance of pastoral economies based on transhumance, whose social groups moved around the pastures of this greater region. The dragon stones and the seal impression from Acemhöyük indicate that the ritual practice was invested of a great meaning, giving birth to a family of significant monuments, themselves in turn being favored as central symbolic elements of important seals.

### Bibliography

- Belli O. 2005. Anadolunun en büyük insan biçimli taş heykeli Oltuda bulundu. *Haberler* 20, 19-20.
- Bobokhyan A. 2008. *Kommunikation und Austausch im Hochland zwischen Kaukasus und Taurus*, ca. 2500-1500 v. Chr. Oxford.
- Barseghian L. A. 1968. Les višaps des monts Guegham. *Revue des études arméniennes* 5, 289-293.
- Dercksen J. G. 2004. *Old Assyrian Institutions*. Leiden.
- Edens C. 1995. Transcaucasia at the End of the Early

Bronze Age. *Bulletin of the American Schools of Oriental Research* 299/300, 53-64.

- Esajan C. A. 1980. *Skul'ptura drevnej Armenii*. Jerevan.
- Ishkol-Kerovpian K. 1986. Mythologie der vorchristlichen Armenier. In: Haussig H. W. (ed.). *Götter und Mythen der kaukasischen und iranischen Völker*. Stuttgart, 59-160.
- Kalantar A. 1994 (1933). An Ancient Irrigation System in Armenia. In: Karakhanyan G. (ed.). *Armenia: From the Stone Age to the Middle Ages: Selected papers by Ashkharbek Kalantar*. Paris, 29-35.
- Khanzadyan E. 2005. Vishap of Lchashen. *Culture of Ancient Armenia* 13, 86-91 (in Arm.).
- Kletter R., Ziffer I., Zwickel W. 2010. *Yavneh I. The Excavation of the Repository Pit and the Cult Stands*. OBO Archaeological Series 30. Fribourg, Göttingen.
- Kuniholm P. I., Newton M. W., Griggs C. B., Sullivan P. J. 2005. Dendrochronological Dating in Anatolia: The Second Millennium BC. *Der Anschnitt* 18, 41-47.
- Laneri N., Schwartz M. 2011. The Middle Bronze Age in Southeastern Turkey. In: Steadman S. R., McMahon G. (ed.). *Oxford Handbook of Anatolian Studies*. Oxford, 337-362.
- Lumsden S. 2008. Material Culture and the Middle Ground in the Old Assyrian Colony Period. In: Michel C. (ed.). *Old Assyrian Studies in Memory of Paul Garelli*. Leiden, 21-43.
- Manaseryan N., Balyan L. 2002. The Birds of Ancient Armenia. *Acta Zoologica Cracoviensia* 45, 405-414.
- Marr N. J., Smirnov Y. I. 1931. Les Vichaps. *Memoires de l'Académie de l'histoire de la culture materielle* 1. Leningrad.
- Özürat A. 2001. *Doğu Anadolu yayla kültürleri: M.Ö. II. binyıl*. İstanbul.
- Özgüç N. 1980. Seal Impressions from the Palaces at Acemhöyük. In: Porada E. (ed.), *Ancient Art in Seals*. Princeton, 61-100.
- Özgüç N. 2002. Götterprozessionen, Kriegs- und Jagdszenen. Ein Überblick über den Motivreichtum anatolischer Roll- und Stempelsiegel des 20.-18. Jahrhunderts v. Chr. In: *Die Hethiter und Ihr Reich. Das Volk der 1000 Götter*. Bonn, 234-239.
- Öztan A. 2008. Some New Finds from Acemhöyük. In: Bonatz D., Czichon R.M., Kreppner F.J. (ed.). *Fundstellen. Gesammelte Schriften zur Archäologie und Geschichte Alt Vorderasiens ad honorem Hartmut Kühne*. Wiesbaden, 25-29.
- Puturidze M. 2003. Social and Economic Shifts in the South Caucasian Middle Bronze Age. In: Smith A.T., Rubinson K.S. (ed.). *Archaeology in the Borderlands: Investigations in Caucasia and Beyond*. Los Angeles, 111-127.
- Smith A. T. Badalyan R. S., Avetisyan P. (ed.) 2009. *The Archaeology and Geography of Ancient Transcaucasian*

*Societies. Volume 1: The Foundations of Research and Regional Survey in the Tsaghkahovit Plain, Armenia.* Chicago.

Tokaishvili E. 1909. „Khristianskiye pamyatniki“. *Materialy po archeologii Kavkaza: sobrannye ekspeditsiyami Imperatorskago moskovskago archeologicheskago obschestva* 12, 1-164.

van Loon M. N. 1985. *Anatolia in the Second Millennium BC.* Leiden.

Veenhof K. R. 1993. On the Identification and Implications of Some Bullae from Achemhöyük and Kültepe. In: Mellinck M. J. (ed.). *Aspects of Art and Iconography: Anatolia and its Neighbors, Festschrift Nimet Özgüç.* Ankara, 645-657.

Veenhof K. R., Eidem J. 2008. *Mesopotamia. The Old Assyrian Period.* Göttingen.